FORM 3	DANGEROUS WASTE PERMIT APPLICATION	I. EPA/State I.D. No.
		W A 7 8 9 0 0 0 8 9 6 7

FOR OFFICIAL USE ONLY

Application Approved	Date Received (month/ day / year)	Comments
		Approved 07/24/02

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA/STATE I.D. Number, or If this is a revised application, enter your facility's EPA/STATE I.D. Number in Section I above.

A. First Application (place an "X" below and provide the appropriate date)

☐ **1. Existing Facility** (See instructions for definition of "existing" facility. Complete item below.)

MO	DAY	YEAR
03	22	1943

*For existing facilities, provide the date (mo/day/yr) operation began or the date construction commenced. (use the boxes to the left)
*The date construction of the Hanford Facility commenced

☐ **2. New Facility** (Complete item below.)

MO	DAY	YEAR

For new facilities, provide the date (mo/day/yr) operation began or is expected to begin

B. Revised Application (Place an "X" below and complete Section I above)

☒ **1. Facility has an interim Status Permit**

☒ **2. Facility has a Final Permit**

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. Process Code – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the codes(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the (Section III-C).

B. Process Design Capacity – For each code entered in column A enter the capacity of the process.

1. Amount – Enter the amount.
2. Unit of Measure – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
STORAGE:		
Container (barrel, drum, etc.)	S01	Gallons or liters
Tank	S02	Gallons or liters
Waste pile	S03	Cubic yards or cubic meters
Surface impoundment	S04	Gallons or liters
	S06	Cubic yards or cubic meters*
DISPOSAL:		
Injection well	D80	Gallons or liters
Landfill	D81	Acre-feet (the volume that would cover one acre to a Depth of one foot) or hectare-meter
Land application	D82	Acres or hectares
Ocean disposal	D83	Gallons per day or liters per day
Surface impoundment	D84	Gallons or liters
TREATMENT:		
Tank	T01	Gallons per day or liters per day
Surface impoundment	T02	Gallons per day or liters per day
Incinerator	T03	Tons per hour or metric tons per hour; gallons per hour or liters per hour
Other (use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Section III-C.)	T04	Gallons per day or liters per day

Unit of Measure	Unit of Measure Code	Unit of Measure	Unit of Measure Code	Unit of Measure	Unit of Measure Code
Gallons	G	Liters Per Day	V	Acre-Feet	A
Liters	L	Tons Per Hour	D	Hectare-Meter	F
Cubic Yards	Y	Metric Tons Per Hour	W	Acres	B
Cubic Meters	C	Gallons Per Hour	E	Hectares	Q
Gallons Per Day	U	Liters Per Hour	H		

III. PROCESS – CODES AND DESIGN CAPACITIES (continued)

Example for Completing Section III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks; one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

Line No.	A. Process Code *(from list above)*			B. Process Design Capacity				For Official Use Only			
				1. Amount *(Specify)*		2. Unit of Measure *(enter code)*					
X-1	*S*	*0*	*2*	*600*		*G*					
X-2	*T*	*0*	*3*	*20*		*E*					
1	S	0	2	811,280		L					
2	T	0	1	107,126		V					
3	S	0	1	51,008		L					
4	S	0	6	35,170		C					
5											
6											
7											
8											
9											
10											

C. Space for additional process codes or for describing other process (code "T04"). For each process entered here include design capacity.

B Plant, which was constructed in 1943 and began operation in April of 1945, is located in the northwestern portion of the 200 East Area. The first mission for B Plant was the recovery of plutonium using a bismuth phosphate chemical separation process (1945 to 1952). In the early 1960's, B Plant was modified for a second mission, the recovery and purification of cesium and strontium. The cesium and strontium were encapsulated and stored in the Waste Encapsulation and Storage Facility (WESF).

Presently, the B Plant Complex consists of the main facility (221-B) and various support structures (page 12 of 21). The B Plant Complex contains five dangerous waste storage and/or treatment tank systems, Cell 4 container storage, and containment building storage. Most waste handling activities were conducted in the 221-B Building. The 221-B Building used a remote process cell design to house the process tanks and associated equipment. A typical cell is 5.5 meters long by 3.9 meters wide by 8.5 meters deep. Each cell is covered with four concrete cover blocks. In addition, the 221-B Building is made of reinforced concrete and is 259.1 meters long by 20.7 meters wide by 22.5 meters high, covering an area of 5,369.8 square meters. Additional operations also were carried out in the 221-BB Building, the 221-BF Facility, and the 276-BA Facility. (Refer to the B Plant Complex Vessel Table, following.)

S02/T01

NEUTRALIZED CURRENT ACID WASTE (NCAW) TREATMENT AND STORAGE SYSTEM: The NCAW treatment and storage system is located in the 221-B Building. The NCAW was transferred to the B Plant Complex (221-B Building) for the Tank Waste Remediation pretreatment project. The NCAW inventory was transferred back to the Double-Shell Tank (DST) System in May 1993 after the Tank Waste Remediation pretreatment project was canceled. Although no waste currently is being stored or treated, and there is no intention of future storage or treatment of any waste in this tank system, the system is included to reflect past operations. (Refer to the B Plant Complex Vessel Table, following.)

LOW-LEVEL WASTE (LLW) TREATMENT AND STORAGE SYSTEM: The LLW treatment and storage system is located within the 221-B Building. Treatment of low-level waste (to meet DST System acceptance standards) includes the addition of sodium hydroxide until the pH is greater than 12.0. Treatment also includes the addition of sodium nitrite until the nitrite concentration is above 600 parts per million and any other chemicals required to meet the acceptance criteria. The low-level waste tank storage was intended for waste generated at the 221-B Building and WESF that was not be transferred within 90 days to the DST System. There is no intent or plan to store low-level waste at the 221-B Building from other sources. Although no waste currently is being stored or treated, and there is no intention of future storage or treatment of any waste in this tank system, the system is included to reflect past operations. (Refer to the B Plant Complex Vessel Table, following.)

LOW-LEVEL WASTE CONCENTRATOR: The low-level waste concentrator (formerly known as the single-stage thermal siphon reboiler), located in Cell 23 of the 221-B Building, was operated to concentrate the low-level waste in the low-level waste storage and treatment tank system. The low-level waste concentrator is a thermal siphon and shell and tube heat exchanger. This system currently is inactive with no intention of resuming operation and is included to reflect past operations. (Refer to the B Plant Complex Vessel Table, following.)

S02/T01 (cont)

ORGANIC MIXED WASTE STORAGE: The organic mixed waste storage tank system was used to store organic solvent used in recovery and purification of strontium and cesium. The system consists of vessels located in the 221-B Building and in 276-BA Facility. The organic mixed waste was transferred to an off-site TSD facility for disposal by incineration in late 1997. This system currently is inactive with no intention of resuming operation and is included to reflect past operations. (Refer to the B Plant Complex Vessel Table, following.)

ISO WEST TANK CLOSURE: The 276-BA Facility was constructed with two identical storage tanks. Of these two tanks, the ISO West tank never managed organic mixed waste. In 1998, the ISO West tank was administratively closed (98-EAP-136, Letter, James E. Rasmussen, RL, to R. E. Skinnarland, Ecology, CERTIFIED ISO WEST INTERIM ORGANIC STORAGE TANK (ISO WEST TANK) ADMINISTRATIVE CLOSURE TECHNCIAL DATA SYNOPSIS (TSD: TS-2-3), dated March 4, 1998; Letter, Shri Mohan, Ecology, to James Rasmussen, RL, RE: APPROVAL OF THE PROCEDURAL CLOSURE OF THE B PLANT INTERNATIONAL STANDARDS ORGANIZATION (ISO) WEST TANK ADMINISTRATIVE CLOSURE, dated October 20, 1998). The ISO West tank has been removed from the B Plant Complex for use elsewhere on the Hanford site.

MISCELLANEOUS TANKS STORAGE SYSTEM: The miscellaneous tanks are located in the 221-B Building, the 221-BB Building, and the 221-BF Facility. The miscellaneous tanks in the B Plant Complex that managed mixed waste after the 1987 date of regulation for mixed waste in the state of Washington are identified on the B Plant Complex Vessel Table. This system currently is inactive with no intention of using these tanks for future waste management activities. This system is included to reflect past operations. (Refer to the B Plant Complex Vessel Table, following.)

S01

CELL 4 CONTAINER STORAGE: The 221-B Building Cell 4 containerized waste storage unit is used for the storage of 208-liter (55-gallon) containers. Waste stored in Cell 4 containers consists of solid mixed waste with no free liquids. Waste stored in Cell 4 includes light bulbs with lead solder. There is no intent to receive additional waste in Cell 4. The maximum design capacity for container storage is 51,008 liters.

S06

CONTAINMENT BUILDING/STORAGE: The designation S06 (containment building/storage) has been used to indicate that the solid mixed waste stored in the 221-B Building (on the canyon deck and in various cells) is considered to be in a containment building subject to the requirements of 40 CFR 265, Subpart DD and WAC 173-303-400(3)(a). The solid mixed waste consists of radioactively contaminated failed canyon process equipment, jumpers and lead shielding materials. The failed canyon process equipment and jumpers (or isolated components thereof) contain lead used as weights, counterweights, or radioactive shielding. The lead shielding materials include lead blankets, lead sheets, lead bricks, and lead window glass. The solid mixed waste also could be contaminated with residues from the processing of tank waste. Future additions of waste to the containment building will be restricted to the types of waste described above. The maximum storage capacity is 35,170 cubic meters.

B PLANT COMPLEX VESSEL TABLE

NEUTRALIZED CURRENT ACID WASTE (NCAW) TREATMENT AND STORAGE SYSTEM		
Vessel ID	Location	Capacity (liters)
TK-6-2	221-B, Cell 6	19,684
TK-7-1	221-B, Cell 7	19,306
TK-7-2	221-B, Cell 7	18,927
TK-8-1	221-B, Cell 8	19,684
TK-8-2	221-B, Cell 8	19,684
TK-13-1	221-B, Cell 13	15,142
TK-14-2	221-B, Cell 14	14,763
TK-29-3	221-B, Cell 29	15,520
TK-39-2	221-B, Cell 39	6,814
TK-39-5	221-B, Cell 39	7,571
LOW-LEVEL WASTE (LLW) TREATMENT AND STORAGE SYSTEM		
Vessel ID	Location	Capacity (liters)
TK-9-1	221-B, Cell 9	19,684
TK-9-2	221-B, Cell 9	19,684
TK-10-1	221-B, Cell 10	37,839
TK-24-1	221-B, Cell 24	52,616
TK-25-1	221-B, Cell 25	18,548
TK-25-2	221-B, Cell 25	18,548
TK-26-3	221-B, Cell 26	9,922
TK-39-1	221-B, Cell 39	13,120
NCAW and LLW storage capacity*		347,056
NCAW and LLW treatment capacity*		79,493 per day

LOW-LEVEL WASTE (LLW) CONCENTRATOR		
Vessel ID	Location	Capacity (liters)
E-23-3	221-B, Cell 23	11,356
E-23-3-1	221-B, Cell 23	0
E-23-3-2	221-B, Cell 23	0
D-23-2	221-B, Cell 23	0
E-23-4	221-B, Cell 23	0
TK-23-1	221-B, Cell 23	2,990
Storage capacity*		14,346
Treatment capacity*		27,633 per day

ORGANIC MIXED WASTE STORAGE SYSTEM		
Vessel ID	Location	Capacity (liters)
TK-26-1	221-B, Cell 26	14,763
TK-27-2	221-B, Cell 27	7,571
TK-27-3	221-B, Cell 27	14,385
TK-27-4	221-B, Cell 27	1,060
TK-28-3	221-B, Cell 28	14,385
TK-28-4	221-B, Cell 28	1,060
TK-29-4	221-B, Cell 29	492
TK-30-3	221-B, Cell 30	15,520
ISO EAST	276-BA	17,500
Storage capacity*		86,736

MISCELLANEOUS TANK SYSTEM		
Vessel ID	Location	Capacity (liters)
E-5-2	221-B, Cell 5	1,639
TK-17-1	221-B, Cell 17	18,700
TK-17-2	221-B, Cell 17	18,908
T-18-2	221-B, Cell 18	11,761
TK-18-3	221-B, Cell 18	2,794
E-20-2	221-B, Cell 20	1,552
TK-21-1	221-B, Cell 21	53,272
TK-22-1	221-B, Cell 22	1,775
T-28-1	221-B, Cell 28	2,642
TK-29-2	221-B, Cell 29	15,077
T-30-1	221-B, Cell 30	2,634
TK-32-1	221-B, Cell 32	15,024
TK-33-1	221-B, Cell 33	53,211
TK-34-2	221-B, Cell 34	15,520
TK-35-2	221-B, Cell 35	15,002
TK-36-1	221-B, Cell 36	15,547
TK-100	221-B, Canyon Deck	15,122
BCP	221-BB	2,271
BCS	221-BB	2,271
221-BF-A	221-BF	49,210
221-BF-B	221-BF	49,210
Storage capacity*		363,142

* Treatment and storage capacities are provided to reflect past operations. Current and/or future B Plant activities do not propose utilization of treatment or storage capacity beyond what has been agreed to for facility transition purposes under Section 8 of the Hanford Federal Facility Agreement and Consent Order.

IV. DESCRIPTION OF DANGEROUS WASTES

A. Dangerous Waste Number – Enter the digit number from Chapter 173-303 WAC for each listed dangerous waste you will handle. If you handle dangerous wastes which are not listed in Chapter 173-303 WAC, enter the four-digit number(s) that describes the characteristics and/or the toxic contaminants of those dangerous wastes.

B. Estimated Annual Quantity - For each listed waste entered in column A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. Unit of Measure - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate odes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
Pounds	P	Kilograms	K
Tons	T	Metric Tons	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. Processes

1. Process Codes:

   For listed dangerous waste: For each listed dangerous waste entered in column A select the code(s) from the list of process codes contained in Section III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

   For non-listed dangerous wastes: For each characteristic or toxic contaminant entered in Column A, select the code(s) from the list of process codes contained in Section III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed dangerous wastes that possess that characteristic or toxic contaminant.

   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. Process Description: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

   NOTE: DANGEROUS WASTES DESCRIBED BY MORE THAN ONE DANGEROUS WASTE NUMBER - Dangerous wastes that can be described by more than one Waste Number shall be described on the form as follows:

   1. Select one of the Dangerous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
   2. In column A of the next line enter the other Dangerous Waste Number that can be used to describe the waste. In column D(2) on that line enter "Included with above" and make no other entries on that line.
   3. Repeat step 2 for each other Dangerous Waste Number that can be used to describe the dangerous waste.

   Example for completing Section IV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste.

Line No.	A. Dangerous Waste No. *(enter code)*				B. Estimated Annual Quantity of Waste	C. Unit of Measure *(enter code)*			D. Processes				
									1. Process Codes *(enter)*				2. Process Description *(if a code is not entered in D(1))*
X-1	*K*	*0*	*5*	*4*	*900*		*P*		*T03*	*D80*			
X-2	*D*	*0*	*0*	*2*	*400*		*P*		*T03*	*D80*			
X-3	*D*	*0*	*0*	*1*	*100*		*P*		*T03*	*D80*			
X-4	*D*	*0*	*0*	*2*					*T03*	*D80*			*Included with above*

Photocopy this page before completing if you have more than 26 wastes to list.

I.D. Number *(enter from page 1)*											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES *(continued)*

Line No.	A. Dangerous Waste No. *(enter code)*				B. Estimated Annual Quantity of Waste	C. Unit of Measure *(enter code)*			D. Processes				
									1. Process Codes *(enter)*				2. Process Description *(if a code is not entered in D(1))*
1	D	0	0	8	6,804		K		S01				Storage-Container
2	W	T	0	1			K		S01				Storage-Container
3	W	T	0	2			K		S01				Storage-Container
4	D	0	0	2	6,804		K		S06				Containment Building/Storage
5	D	0	0	4			K		S06				Containment Building/Storage
6	D	0	0	5			K		S06				Containment Building/Storage
7	D	0	0	6			K		S06				Containment Building/Storage
8	D	0	0	7			K		S06				Containment Building/Storage
9	D	0	0	8			K		S06				Containment Building/Storage
10	D	0	0	9			K		S06				Containment Building/Storage
11	D	0	1	0			K		S06				Containment Building/Storage
12	D	0	1	1			K		S06				Containment Building/Storage
13	F	0	0	1			K		S06				Containment Building/Storage
14	F	0	0	2			K		S06				Containment Building/Storage
15	F	0	0	3			K		S06				Containment Building/Storage
16	F	0	0	4			K		S06				Containment Building/Storage
17	F	0	0	5			K		S06				Containment Building/Storage
18	W	T	0	1			K		S06				Containment Building/Storage
19	W	T	0	2			K		S06				Containment Building/Storage
20	D	0	0	2	375,627*		K		S02				Storage-Tank
21	D	0	0	4			K		S02				Storage-Tank
22	D	0	0	5			K		S02				Storage-Tank
23	D	0	0	6			K		S02				Storage-Tank
24	D	0	0	7			K		S02				Storage-Tank
25	D	0	0	8			K		S02				Storage-Tank
26	D	0	0	9			K		S02				Storage-Tank
27	D	0	1	0			K		S02				Storage-Tank
28	D	0	1	1			K		S02				Storage-Tank
29	F	0	0	1			K		S02				Storage-Tank
30	F	0	0	2			K		S02				Storage-Tank
31	F	0	0	3			K		S02				Storage-Tank
32	F	0	0	4			K		S02				Storage-Tank
33	F	0	0	5			K		S02				Storage-Tank
34	W	T	0	1			K		S02				Storage-Tank
35	W	T	0	2			K		S02				Storage-Tank
* The quantity of waste represents past operational activities. There are no plans to use these vessels for mixed waste activities.													
36	D	0	0	2	90,992*		K		T01				Treatment-Tank
37	D	0	0	4			K		T01				Treatment-Tank
38	D	0	0	5			K		T01				Treatment-Tank
39	D	0	0	6			K		T01				Treatment-Tank
40	D	0	0	7			K		T01				Treatment-Tank
41	D	0	0	8			K		T01				Treatment-Tank

Photocopy this page before completing if you have more than 26 wastes to list.

I.D. Number *(enter from page 1)*											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES *(continued)*

Line No.	A. Dangerous Waste No. *(enter code)*				B. Estimated Annual Quantity of Waste	C. Unit of Measure *(enter code)*			D. Processes				
									1. Process Codes *(enter)*				2. Process Description *(if a code is not entered in D(1))*
42	D	0	0	9			K		T01				Treatment-Tank
43	D	0	1	0			K		T01				Treatment-Tank
44	D	0	1	1			K		T01				Treatment-Tank
45	F	0	0	1			K		T01				Treatment-Tank
46	F	0	0	2			K		T01				Treatment-Tank
47	F	0	0	3			K		T01				Treatment-Tank
48	F	0	0	4			K		T01				Treatment-Tank
49	F	0	0	5			K		T01				Treatment-Tank
50	W	T	0	1			K		T01				Treatment-Tank
51	W	T	0	2			K		T01				Treatment-Tank
* The quantity of waste represents past operational activities. There are no plans to use these vessels for mixed waste activities.													
52	D	0	0	2	1,085,878*		K		S02	T01			Storage-Tank/Treatment-Tank
53	D	0	0	4			K		S02	T01			Storage-Tank/Treatment-Tank
54	D	0	0	5			K		S02	T01			Storage-Tank/Treatment-Tank
55	D	0	0	6			K		S02	T01			Storage-Tank/Treatment-Tank
56	D	0	0	7			K		S02	T01			Storage-Tank/Treatment-Tank
57	D	0	0	8			K		S02	T01			Storage-Tank/Treatment-Tank
58	D	0	0	9			K		S02	T01			Storage-Tank/Treatment-Tank
59	D	0	1	0			K		S02	T01			Storage-Tank/Treatment-Tank
60	D	0	1	1			K		S02	T01			Storage-Tank/Treatment-Tank
61	F	0	0	1			K		S02	T01			Storage-Tank/Treatment-Tank
62	F	0	0	2			K		S02	T01			Storage-Tank/Treatment-Tank
63	F	0	0	3			K		S02	T01			Storage-Tank/Treatment-Tank
64	F	0	0	4			K		S02	T01			Storage-Tank/Treatment-Tank
65	F	0	0	5			K		S02	T01			Storage-Tank/Treatment-Tank
66	W	T	0	1			K		S02	T01			Storage-Tank/Treatment-Tank
67	W	T	0	2			K		S02	T01			Storage-Tank/Treatment-Tank
* The quantity of waste represents past operational activities. There are no plans to use these vessels for mixed waste activities.													
68													
69													

IV. DESCRIPTION OF DANGEROUS WASTE (continued)

E. Use this space to list additional process codes from Section D(1) on page 3.

V. FACILIITY DRAWING Refer to attached drawing(s).

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS Refer to attached photograph(s).

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION This information is provided on the attached drawings and photos.

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*

VIII. FACILITY OWNER

☒ A. If the facility owner is also the facility operator as listed in Section VII on Form 1, "General Information," place an "X" in the box to the left and skip to Section XI below.

B. If the facility owner is not the facility operator as listed in Section VII on Form 1, complete the following items:

1. Name of Facility's Legal Owner	2. Phone Number *(area code & no.)*

3. Street or P.O. Box	4. City or Town	5. St.	6. Zip Code

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name *(print or type)*	Signature	Date Signed
Keith A. Klein, Manager U.S. Department of Energy Richland Operations Office		6/2/02

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name *(Print Or Type)*	Signature	Date Signed
See attachment		

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

6/5/02

Owner/Operator
Keith A. Klein, Manager
U.S. Department of Energy
Richland Operations Office

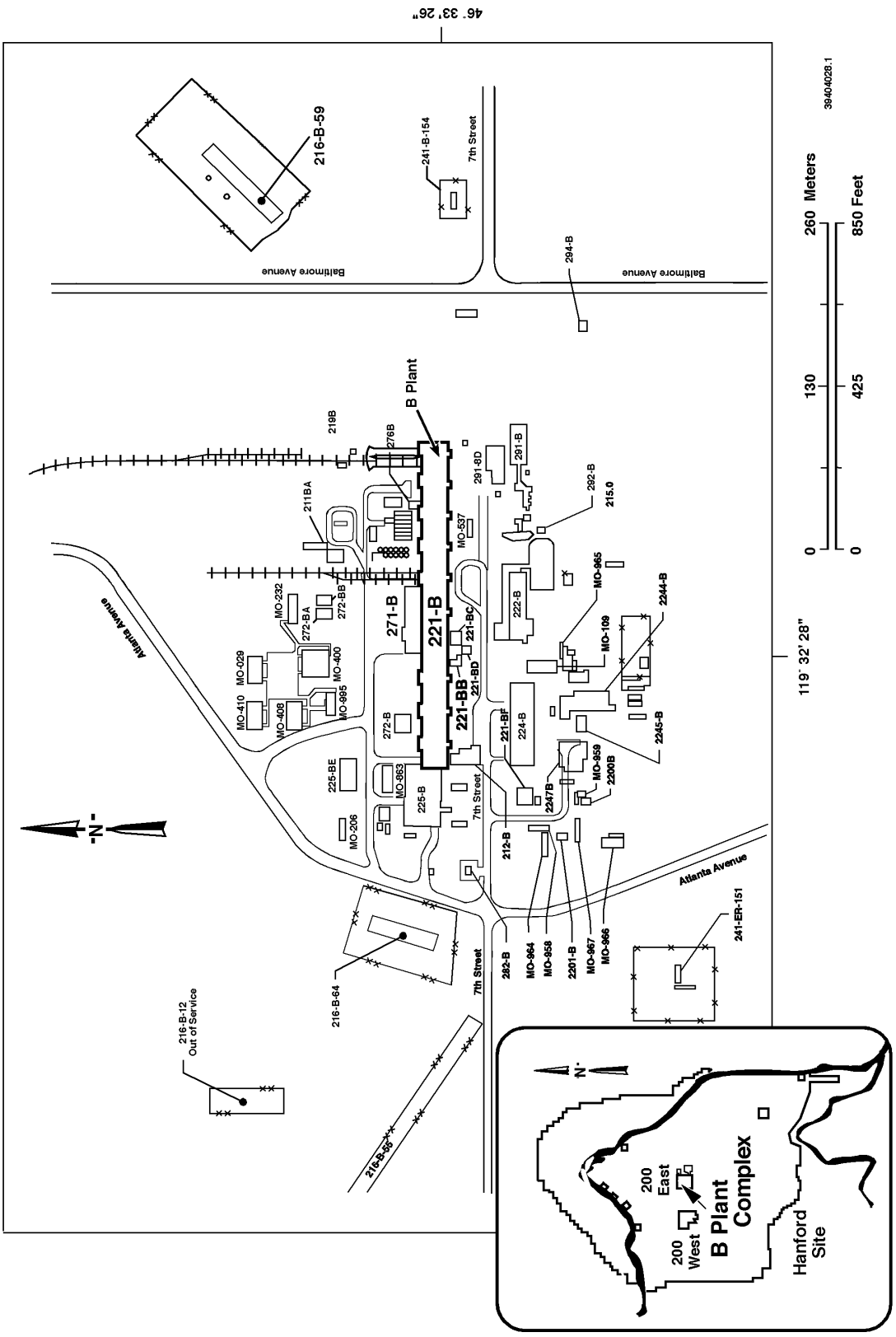
Date

4-18-02

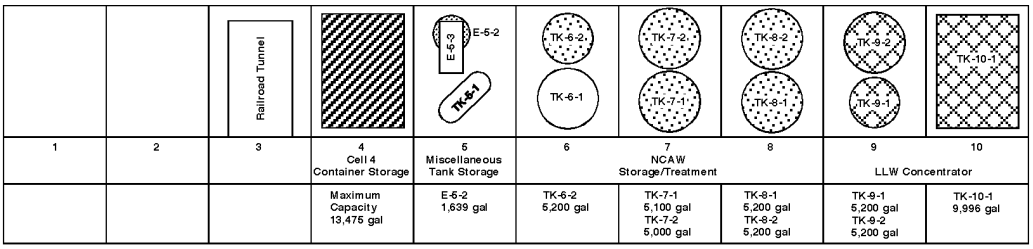
Co-operator
E. Keith Thomson
President and
Chief Executive Officer
Fluor Hanford

Date

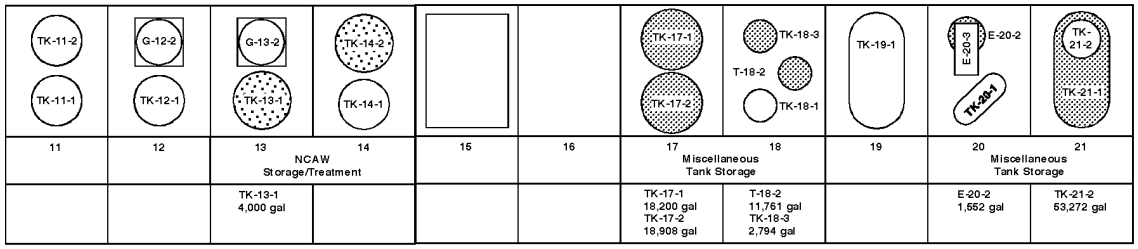
B Plant Complex Site Plan



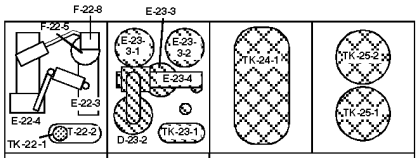
221-B Building Process Cells



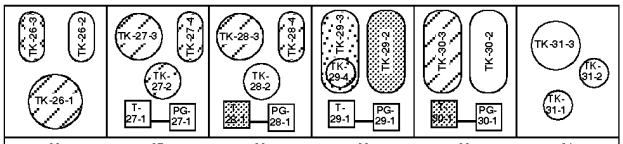
1	2	3	4	5	6	7	8	9	10
			Cell 4 Container Storage	Miscellaneous Tank Storage	NCAW Storage/Treatment			LLW Concentrator	
			Maximum Capacity 13,475 gal	E-6-2 1,639 gal	TK-6-2 5,200 gal	TK-7-1 5,100 gal TK-7-2 5,000 gal	TK-8-1 5,200 gal TK-8-2 5,200 gal	TK-9-1 5,200 gal TK-9-2 5,200 gal	TK-10-1 9,996 gal



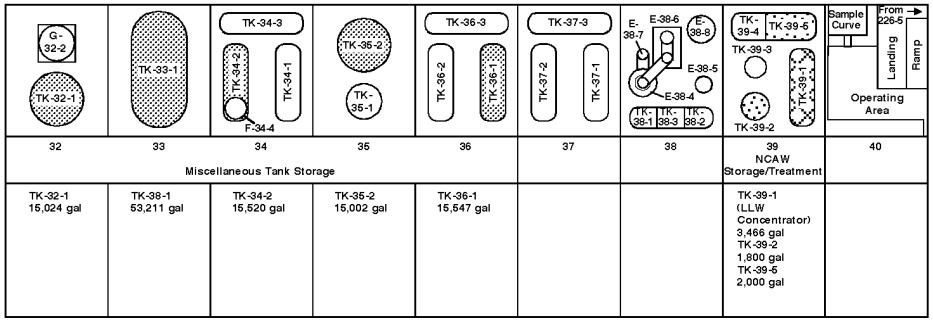
11	12	13	14	15	16	17	18	19	20	21
		NCAW Storage/Treatment				Miscellaneous Tank Storage			Miscellaneous Tank Storage	
		TK-13-1 4,000 gal				TK-17-1 18,200 gal TK-17-2 18,908 gal	T-18-2 11,761 gal TK-18-3 2,794 gal		E-20-2 1,552 gal	TK-21-2 53,272 gal



22	23	24	25
TK-14-2 3,900 gal	Low-Level Waste Concentrator	Low-Level Waste Staging and Treatment	
TK-22-1 1,775 gal	TK-23-1 790 gal	TK-24-1 13,900 gal	TK-25-1 4,900 gal TK-25-2 4,900 gal



26	27	28	29	30	31
Organic Waste Storage/Treatment/LLW Concentrator/Misc. Tank Storage					
TK-26-1 3,900 gal TK-26-3 2,621 gal	TK-27-2 2,000 gal TK-27-3 3,800 gal TK-27-4 280 gal	TK-28-3 3,800 gal TK-28-4 280 gal T-28-1 2,642 gal	TK-29-3 4,100 gal TK-29-4 130 gal TK-29-2 16,077 gal	TK-30-3 4,100 gal T-30-1 2,634 gal	



32	33	34	35	36	37	38	39	40
Miscellaneous Tank Storage							NCAW Storage/Treatment	
TK-32-1 15,024 gal	TK-38-1 53,211 gal	TK-34-2 15,520 gal	TK-35-2 15,002 gal	TK-36-1 15,547 gal			TK-39-1 (LLW Concentrator) 3,466 gal TK-39-2 1,800 gal TK-39-5 2,000 gal	

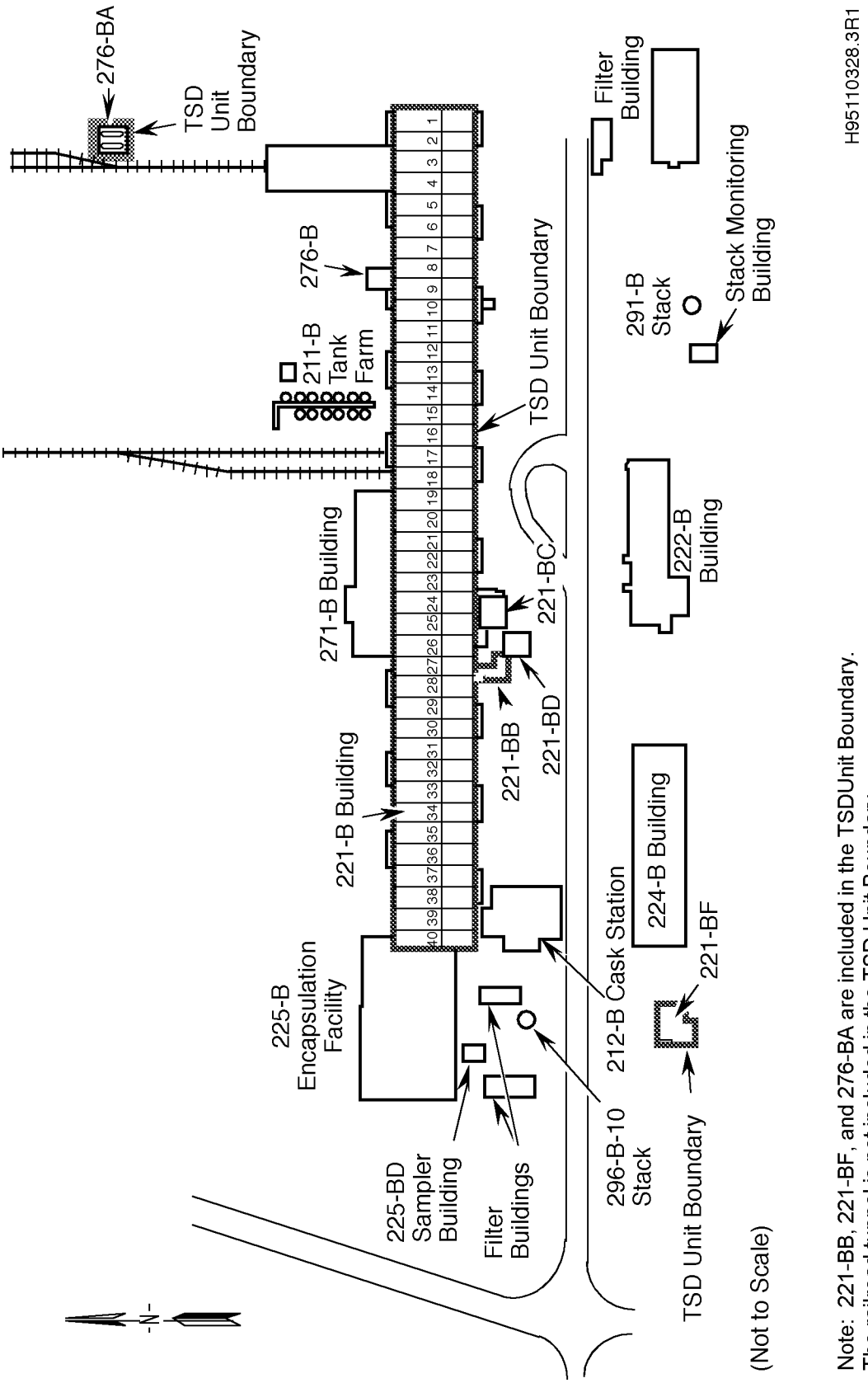
Key:

NCAW = neutralized current acid waste
gal = gallon
D = deentrainer
E = heat transfer equipment
F = filter
G = centrifuge
P = pump
PG = pulse generator
T = tower
TK = tank

Low-Level Waste Storage and Treatment
Low-Level Waste Concentrator
NCAW Storage/Treatment Tank System
Organic Waste Storage
Miscellaneous Tank Storage
Container Storage

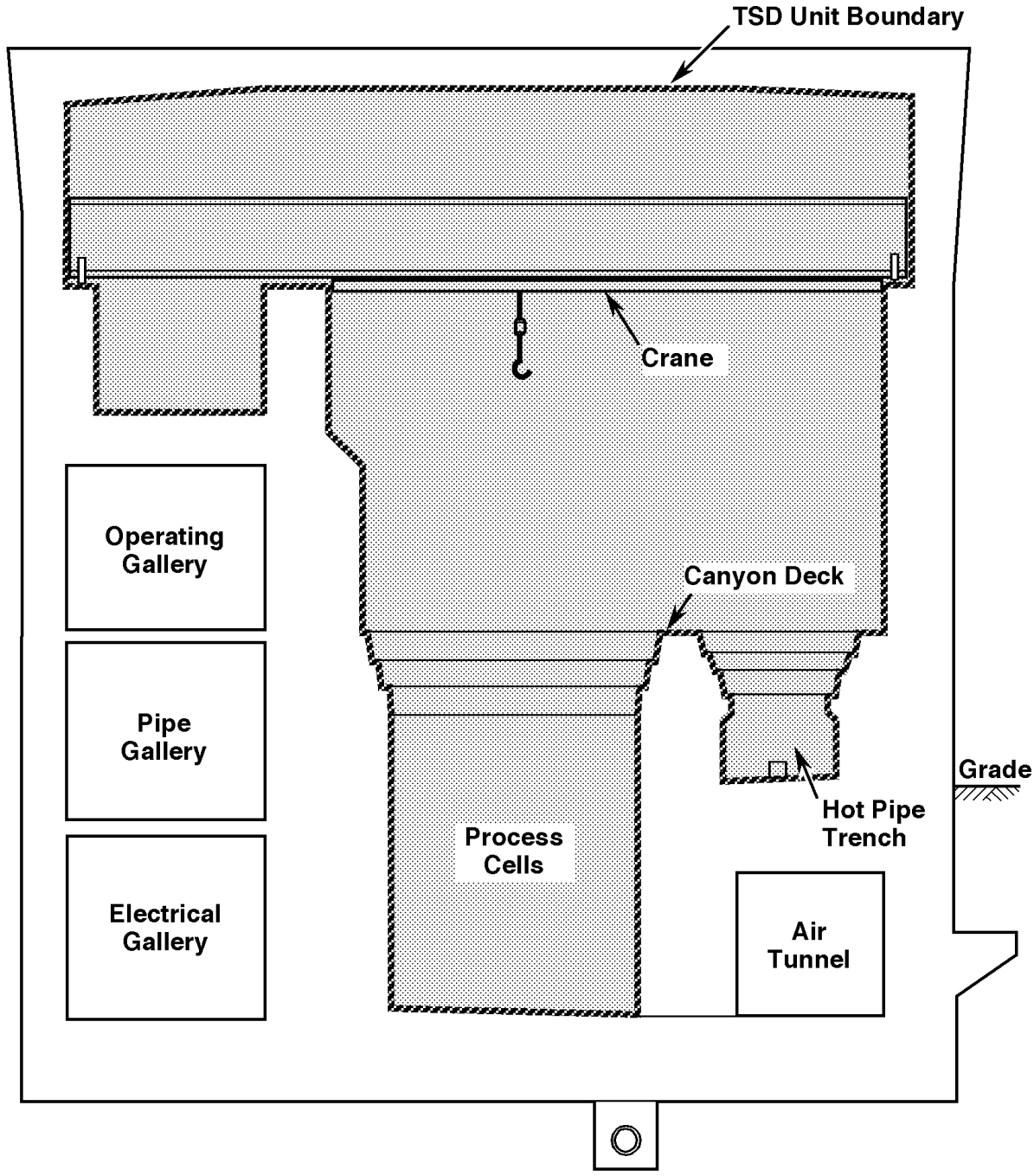
For conversion to liters, multiply gallons by 3.7854.

39402094.1R2



Note: 221-BB, 221-BF, and 276-BA are included in the TSDUnit Boundary.
The railroad tunnel is not included in the TSD Unit Boundary.

B PLANT COMPLEX TSD UNIT BOUNDARY (TYPICAL CROSS-SECTIONAL VEIW)



Not to Scale

Note: Shaded portions denote areas that are within the TSD Unit Boundary

H96030202.1R1

B PLANT COMPLEX (AERIAL VIEW)

46°33'26"
119°32'28"

98070285-72CN
(PHOTO TAKEN 1998)

221-B BUILDING CANYON

46°33'26"
119°32'28"

98040211-8CN
(PHOTO TAKEN 1998)

221-B BUILDING
CELL 8

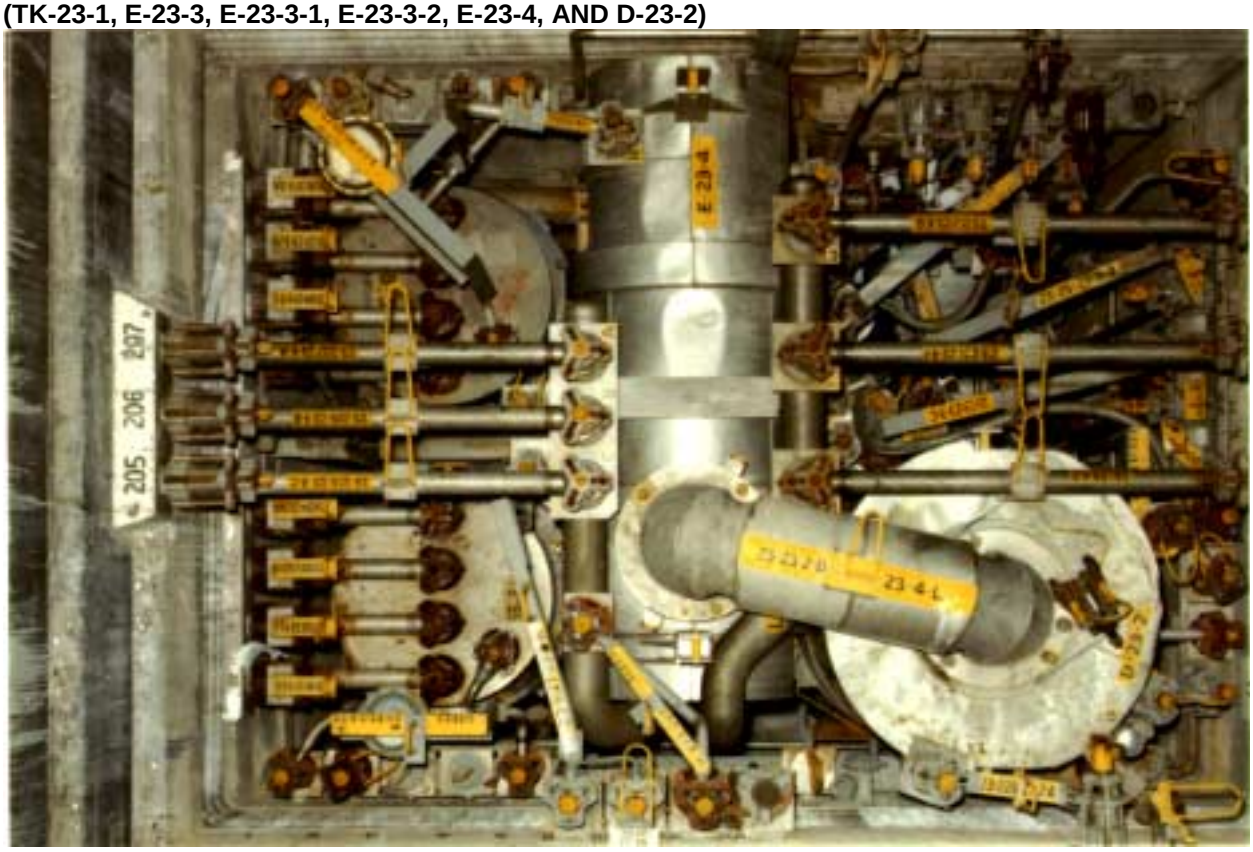
TOP VIEW - TYPICAL NCAW STORAGE AND TREATMENT TANK (TK-8-1 AND TK-8-2), TYPICAL CANYON CELL

46°33'26"
119°32'28"

83107243-11CN
(PHOTO TAKEN 1983)

221-B BUILDING
CELL 23

TOP VIEW - LOW-LEVEL WASTE CONCENTRATOR
(TK-23-1, E-23-3, E-23-3-1, E-23-3-2, E-23-4, AND D-23-2)



46°33'26"
119°32'28"

83107243-40CN
(PHOTO TAKEN 1983)

221-B BUILDING
CELL 4

TOP VIEW - CONTAINER STORAGE

46°33'26"
119°32'28"

94040656-5CN
(PHOTO TAKEN 1994)

276-BA FACILITY
ORGANIC MIXED WASTE STORAGE SYSTEM
EXTERNAL ORGANIC MIXED WASTE STORAGE TANK (ISO EAST)

46°33'26"
119°32'28"

98110220-7CN
(PHOTO TAKEN 1998)

221-BB BUILDING
MISCELLANEOUS TANK STORAGE SYSTEM

46°33'26"
119°32'28"

98100330-8CN
(PHOTO TAKEN 1998)

221-BF FACILITY
MISCELLANEOUS TANK STORAGE SYSTEM

46°33'26"
119°32'28"

98110220-4CN
(PHOTO TAKEN 1998)